

C1
END

Z phase pulse is provided on the electric motors of the master section and the slave section or on machine shafts driven by the electric motors to output a signal in response to rotation of the electric motor or the machine shaft. For the aforesaid rotary encoder there may be employed one attached to each electric motor (rotary encoder mounted on the electric motor for detecting rotation of the electric motor), and the rotary encoder may be coupled with a machine shaft connected with a rotary shaft of each electric motor or coupled with a machine shaft connect through a gear and the like.

Please amend the paragraph on page 9, lines 11-20 of the specification to read as follows:

C2

In FIG. 1, Mm is an electric motor of the master section, Ms1, Ms2 are electric motors of the slave section, respectively, and Pm, Ps1, Ps2 are incremental encoders coupled with the aforesaid electric motors. For the rotary encoders coupled with the electric motors of the master section and the slave section 1, 2, there is available an absolute encoder or an incremental encoder with a Z phase pulse. In the embodiment in FIG. 1, there is illustrated an example where there are used incremental encoders with a Z phase pulse Pm, Ps1, Ps2, in which controllers Am, As1 of the electric motors receive a Z phase pulse Zp once for one revolution of the electric motor and a pulse series Rp in response to the rotation of the electric motor from the incremental encoders Pm, Ps1, Ps2.

Please amend the paragraph on page 11, line 20 to page 12, line 5 of the specification to read as follows:

Outputs of the master phase counter Cm1 and slave phase counter Cs1 are inputted into the phase deviation calculator Hs1, and the phase deviation calculator Hs1 calculates a phase deviation Hs in accordance with the following formula:

C3

$$Hs = Nmax \times Covf + Cm - Cs \quad (1)$$

In the formula (1), Nmax is a pulse number for one revolution of the incremental encoders with a Z phase pulse Pm, Ps1, and Covf is a counted value of overflow pulses of the master phase counter Cm1 and the slave phase counter Cs1 which value is added one by one every time the master phase counter Cm1 overflows and is subtracted one by one every time the slave phase counter Cs1 overflows. Cm and Cs are count values of the master phase counter Cm1 and the slave phase counter Cs1.

In the Claims:

Please amend claims 1-4 to read as follows:

C4 Cont.

1. (Amended) A synchronization controller including controllers of a master section and at least one slave section, each for controlling an electric motor, said synchronization controller serving to accurately synchronize a rotational frequency and a rotation phase of each said electric motor or a machine shaft driven by each said electric motor, each said slave section controller comprising: